

Title (en)
LASER WELDING METHOD

Title (de)
LASERSCHWEISSVERFAHREN

Title (fr)
PROCÉDÉ DE SOUDAGE AU LASER

Publication
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Application
EP 11862667 A 20110428

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Abstract (en)
Provided is a laser welding method with which spatter can be prevented from scattering and adhering to the upper surface of a workpiece and an optical component during welding and with which an undercut or an underfill can be prevented from being formed on the back surface of the workpiece. Specifically, the laser welding method includes emitting two laser beams along a weld line from an upper surface side of a workpiece, the two laser beams being transmitted through different optical fibers and having in-focus spot diameters of 0.3 mm or larger; emitting the laser beams such that a leading laser beam of the two laser beams and a trailing laser beam of the two laser beams are each inclined toward a direction in which welding proceeds at an incident angle with respect to a direction perpendicular to an upper surface of the workpiece, the leading laser beam being ahead of the trailing laser beam on the upper surface of the workpiece in the direction in which welding proceeds, the trailing laser beam being behind the leading laser beam; and setting the incident angle of the leading laser beam to be larger than the incident angle of the trailing laser beam.

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